

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A communication apparatus for setting up a data connection between intelligent devices, comprising:

a transmission oscillator for carrying out a contactless data exchange, said oscillator including a coil;

a communication element which is connected to the coil and to a data processing component of an intelligent device and which emits search signals via the coil to receive a response from another intelligent device,

a measuring device for monitoring a property of the transmission oscillator which outputs a control signal when ascertaining a change of the monitored property, the monitored property of the transmission oscillator includes the frequency or impedance of the transmission oscillator in resonance,

and a switching apparatus which is connected to the measuring device and the communication element and which switches on the communication element when it has received a control signal from the measuring device.

2. (Previously Presented) The communication apparatus according to claim 1, including an assembly that is switchable to the transmission oscillator via a switch, said assembly causing an increase in the bandwidth of the oscillating circuit.

3. (Previously Presented) The communication apparatus according to claim 2, wherein the assembly is a resistive element.

4. (Previously Presented) The communication apparatus according to claim 1, including an assembly switchable to the transmission oscillator via a switch, said assembly causing a change in the resonant frequency of the transmission oscillator.

5. (Previously Presented) The communication apparatus according to claim 4, wherein the assembly is arranged to enable a reduction in the resonant frequency.

6. (Previously Presented) The communication apparatus according to claim 4, wherein the assembly comprises a capacitor.

7. (Previously Presented) The communication apparatus according to claim 1, wherein the measuring frequency of the measuring device is sweepable over a predetermined frequency domain.

8. (Previously Presented) The communication apparatus according to claim 1, wherein the switching apparatus has a time controller for cyclically switching the measuring device on and off.

9. (Previously Presented) The communication apparatus according to claim 8, wherein the time controller keeps the on state of the measuring device shorter than the off state.

10. (Previously Presented) The communication apparatus according to claim 8, wherein the measuring device stores a measuring value obtained during a cyclical on phase.

11. (Previously Presented) The communication apparatus according to claim 10, wherein the measuring device emits a control signal to the switching apparatus when a measuring value deviates from the average of the measuring values stored with the previous on phases.

12. (Previously Presented) The communication apparatus according to claim 8, wherein, when the intelligent device is switched on, the communication element is initially on and the measuring device off.

13. (Previously Presented) The communication apparatus according to claim 1, wherein the measuring device has a first oscillator device coupled at least temporarily with the coil, for producing a first oscillation signal, and a second oscillator device for producing a second oscillation signal.

14. (Previously Presented) The communication apparatus according to claim 13, wherein the measuring device has circuit components for producing the control signal for the switching apparatus on the basis of a phase relation between the first and second oscillation signals or signals derived therefrom.

15. (Currently Amended) A method for switching on a communication element configured to use a coil, which is part of a transmission oscillator, for automatically setting up a data connection with an intelligent device likewise having a communication element and a coil, comprising the following steps:

monitoring a parameter of the transmission oscillator by means of a measuring device, wherein the parameter of the transmission oscillator includes the frequency or impedance of the transmission oscillator in resonance,

producing a control signal upon the occurrence of a change in the monitored property, switching on the communication element by a switching apparatus in response to the control signal.

16. (Previously Presented) The method according to claim 15, wherein the measuring frequency of the measuring unit is swept over a given frequency domain during the monitoring of the property.

17. (New) The communication apparatus according to claim 1, including an assembly switchable to the transmission oscillator via a switch, said assembly causing a change in the resonant frequency of the transmission oscillator, when the measuring device has ascertained a change of the monitored property and outputted a control signal.